

What is claimed is:

1. An acceleration sensor comprising a first body portion, a second body portion, and an interconnecting element making the first body integral with the second body,
5 characterized in that the acceleration sensor comprises detecting means for giving an indication when the second portion damages the detecting means.
2. The acceleration sensor as in claim 1, wherein the detecting means comprises a conductive path, strip, or wire arranged at least on the
10 interconnecting element.
3. The acceleration sensor as in claim 1, wherein the detecting means comprises a conductive doped-silicon or polycrystalline silicon layer at least on the interconnecting element.
4. The acceleration sensor as in claim 2 or 3, wherein the intercon-
15 necting element is adapted to break when an external force affecting the second body portion of the acceleration sensor exceeds a predetermined threshold level, wherein a break of the interconnecting element causes a break in the conductive path, strip, wire, or layer.
5. The acceleration sensor as in claim 1, wherein the detecting
20 means comprises a conductive strip or wire arranged at a distance from the second body portion, wherein the second body portion of the acceleration sensor moves and breaks the path, strip, or wire when an external force affecting the second body portion exceeds a predetermined threshold level.
6. The acceleration sensor as in claim 1, wherein the detecting
25 means form a part of an electrical detection loop.
7. The acceleration sensor as in claim 1, wherein the indication is stored in a memory.
8. The acceleration sensor as in claim 1, wherein the indication is remotely readable.
9. The acceleration sensor as in claim 1, wherein the acceleration
30 sensor is produced by micromachining technology using a surface mountable brittle material.
10. The acceleration sensor as in claim 9, wherein the brittle material is single crystal silicon.
11. The acceleration sensor as in claim 9, wherein the brittle material is polycrystalline silicon.

12. The acceleration sensor as in claim 1, wherein the indication contains at least information identifying a detecting loop broken by an external acceleration force and the time when the indication was given.

5 13. The acceleration sensor as in claim 1 or 7, wherein the status of the acceleration sensor is readable immediately or from the memory.

14. The acceleration sensor as in claim 1, wherein the acceleration sensor belongs to a group of similar acceleration sensors arranged in the same product, each of which sensors respond to a different force.

10 15. The acceleration sensor as in claim 14, wherein at least one of the acceleration sensors in the said group is adapted to give a warning to the user when an external force affecting the second body portion of the said acceleration sensor exceeds a predetermined threshold level.

16. The acceleration sensor as in claim 14, wherein the said group of sensors are integrated in the same single block.

15 17. The acceleration sensor as in claim 14, wherein the acceleration of any of the sensors of the group is remotely identifiable.

18. The acceleration sensor as in claim 14, wherein the said group of sensors are integrated in the same single block together with means for storing indications containing at least the time when the indication was given and the identity of the detecting means.

20 19. The acceleration sensor as in claim 14, wherein the said group of sensors are integrated in the same multichip module together with means for storing indications containing at least the time when the indication was given and the identity of the detecting means.

25 20. The acceleration sensor as in claim 14, wherein the said group of sensors are integrated in the same integrated circuit together with means for storing indications containing at least the time when the indication was given and the identity of the detecting means.

30 21. A handheld terminal, characterized by an acceleration sensor comprising a first body portion, a second body portion, and an interconnecting element making the first body integral with the second body, and further in that the acceleration sensor comprises detecting means for giving an indication when the second portion damages the detecting means and further giving an indication to the terminal user of
35 the event.